



2009 ANNUAL WATER QUALITY REPORT

LOS ANGELES COUNTY WATERWORKS
DISTRICT NO. 29, MALIBU,
AND MARINA DEL REY

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 29, MALIBU & MARINA DEL REY WATER QUALITY REPORT FOR CALENDAR YEAR 2009

The Los Angeles County Waterworks District is pleased to provide you with our 2009 Annual Water Quality Report. We are committed to serving you a reliable supply of high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

There are two drinking water quality standards, Primary and Secondary Drinking Water Standards. Primary Drinking Water Standards are set for substances that are thought to pose a health risk at certain levels and are enforceable by law. Secondary Drinking Water Standards are set for substances that do not pose a health risk and are intended to control the aesthetic qualities related to the public acceptance of drinking water. Secondary Standards are not enforceable by law. We are pleased to inform you that during all of 2009, your drinking water met all Primary and Secondary Drinking Water Standards.

This report is intended to provide you with a better understanding of your drinking water. It contains information about where your water comes from, how your water is treated and monitored, and what contaminants may be present in your water. Moreover, we have included source water assessments, results from our water quality testing, and general information about your drinking water.

[Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.](#)



WATER QUALITY MONITORING

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these regulations, the District has contracted with a State-certified laboratory to conduct all water quality analyses. The source water is tested for chemical, physical, radiological, and bacteriological parameters as required by Federal and State regulations. We also test for additional organic and inorganic chemicals that are not regulated.

Key locations within the distribution system have been selected to monitor water quality. Every week, the distribution system is tested for bacteria and disinfectant levels to ensure that you receive safe and high quality drinking water. The distribution system is also tested for color, odor, temperature, turbidity, and disinfection by-products monthly. All tests are conducted in a State-certified laboratory using Federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.



THE SOURCE OF YOUR WATER AND ITS TREATMENT

The District purchases its water from the West Basin Municipal Water District (WBMWD). WBMWD gets its water from the Metropolitan Water District (MWD). The source of water is the Sacramento River/ San Joaquin Delta via the State Water Project and the Colorado River Aqueduct beginning at Lake Havasu. The District also has emergency connections with the Los Angeles Department of Water and Power and Las Virgenes Municipal Water District.

The water from WBMWD is treated at the MWD Joseph Jensen Filtration Plant using conventional treatment methods, which include coagulation, flocculation, sedimentation, and filtration. The water is then disinfected to kill any remaining microorganisms, such as bacteria, and reduce the potential for their regrowth in the distribution pipes. In July 2005, MWD switched its primary disinfectant for the Joseph Jensen Filtration Plant from chlorine to ozone. The ozone disinfection process improves the taste and odor of the treated water and reduces potential health concerns associated with chlorine disinfection.



SOURCE WATER ASSESSMENT

MWD completed its Source Water Assessment (SWA) in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed. Water supplies from Northern California are most vulnerable to contamination from urban stormwater runoff, wildlife, agriculture, recreation and wastewater.

A copy of the entire assessment can be obtained by contacting MWD by phone at (213) 217-6850.



THE QUALITY OF YOUR WATER

Lead and Copper: The District is required to sample for lead and copper at specific consumer taps. The results for lead and copper are reported as the 90th percentile. The 90th percentile is the result that is greater than 90% of all the results.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).



CONTAMINANTS THAT MAY BE PRESENT IN WATER

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential use.

Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure tap water is safe to drink, the USEPA and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).



WATER QUALITY DATA

The table below lists all drinking water contaminants that were detected during the 2009 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The District tests weekly for bacteria in the distribution system and none was detected during 2009. Trihalomethanes, haloacetic acids, and chlorine are also tested for regularly in the distribution system and are reported below. The

State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old, which is indicated in the parameter.

PARAMETER	PHG or [MCLG]	MCL	TREATED SURFACE WATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	
PRIMARY DRINKING WATER STANDARDS					
INORGANIC CONTAMINANTS					
ALUMINUM (ppm)	600	1000	ND-100	76*	Erosion of natural deposits; residue from some surface water treatment processes
ARSENIC (ppb)	0.004	10	2.5-3.9	3.1*	Natural deposits erosion, glass, and electronics production waste
FLUORIDE (ppm)	1	2	0.6-1.0	0.8	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
NITRATE (as N) (ppm)	10	10	0.6-0.9	0.8*	Runoff and leaching from fertilizer use; sewage; natural erosion
MICROBIOLOGICAL CONTAMINANTS					
TOTAL COLIFORM (%)	0	5	0-2	0.2	Naturally present in the environment
DISINFECTION BYPRODUCT AND DISINFECTION BYPRODUCTS PRECURSORS					
BROMATE (ppb)	0.1	10	4.2-12	6.9*	Byproduct of drinking water ozonation
TOTAL ORGANIC CARBON (ppm)	NS	TT	1.2-1.7	1.7*	Various natural and manmade sources
RADIOLOGICAL CONTAMINANTS					
GROSS ALPHA PARTICLE ACTIVITY (pCi/L)	[0]	15	ND-7.3	3.4	Erosion of natural deposits
GROSS BETA PARTICLE ACTIVITY (pCi/L)	[0]	50	ND-5.2	ND	Erosion of natural deposits
URANIUM (pCi/L)	0.43	20	1.6-2.0	1.8	Erosion of natural deposits
SECONDARY DRINKING WATER STANDARDS					
ALUMINUM (ppb)	600	200	ND-100	76*	Erosion of natural deposits; residue from some surface water treatment processes
CHLORIDE (ppm)	NS	500	77-82	79*	Runoff / leaching from natural deposits; seawater influence
SPECIFIC CONDUCTANCE (µS/cm)	NS	1600	570-610	590*	Substances that form ions when in water; seawater influence
SULFATE (ppm)	NS	500	56-70	66*	Runoff / leaching from natural deposits; industrial wastes
TOTAL DISSOLVED SOLIDS (TDS) (ppm)	NS	1000	310-340	330*	Runoff / leaching from natural deposits
GENERAL PHYSICAL PARAMETERS					
COLOR (units)	NS	15	1-2	2*	Naturally-occurring organic materials
ODOR THRESHOLD (units)	NS	3	2	2	Naturally-occurring organic materials
TURBIDITY (units)	NS	5	0.04-0.05	0.04*	Soil runoff
UNREGULATED CONTAMINANTS					
PARAMETER	PHG or [MCLG]	MCL	TREATED SURFACE WATER		HEALTH EFFECTS/TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVERAGE LEVEL	
BORON (ppb)	NS	NL=1000	190-220	200*	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals
CHLORATE (ppb)	NS	NL=800	ND-79	ND	N/A

PARAMETER	PHG or [MCLG]	MCL	TREATED SURFACE WATER		HEALTH EFFECTS/TYPICAL SOURCE OF CONSTITUENT		
			RANGE OF DETECTION	AVERAGE LEVEL			
CHROMIUM VI (ppb)	NS	NS	0.36-0.63	0.50*	N/A		
N-NITROSODIMETHYLAMINE (ppb) (NDMA)	NS	NL=0.01	ND-0.005	0.003	N/A		
VANADIUM (ppb)	NS	NL=50	6.1-6.7	6.4	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals		
GENERAL MINERAL CONSTITUENTS							
TOTAL ALKALINITY (ppm)	NS	NS	84-93	90*	Leaching from natural deposits		
CALCIUM (ppm)	NS	NS	27-33	31*	Leaching from natural deposits		
TOTAL HARDNESS (ppm)	NS	NS	120-130	130*	Leaching from natural deposits		
MAGNESIUM (ppm)	NS	NS	11-12	13*	Leaching from natural deposits		
pH (pH units)	NS	NS	8.1-8.3	8.2	Natural acidity / alkalinity of water		
POTASSIUM (ppm)	NS	NS	2.6-2.9	2.8*	Leaching from natural deposits		
SODIUM (ppm)	NS	NS	66-74	68*	Leaching from natural deposits		
DISTRIBUTION SYSTEM WATER QUALITY							
DISINFECTANTS & DISINFECTION BYPRODUCTS	MCLG or [MRDLG]	MCL or [MRDL]	RANGE OF DETECTION	HRAA	TYPICAL SOURCE OF CONSTITUENT		
TOTAL CHLORINE (ppm)	[4] as Cl ₂	[4] as Cl ₂	1.19-1.70	1.69	Drinking water disinfectant added for treatment		
TOTAL TRIHALOMETHANES (ppb)	NS	80	20.9-79.2	39.4	Byproduct of drinking water disinfection		
HALOACETIC ACIDS (ppb)	NS	60	ND-25.6	13.6	Byproduct of drinking water disinfection		
LEAD and COPPER (UNITS)	PHG	ACTION LEVEL	RANGE OF DETECTION	90th% LEVEL	NUMBER OF SITES SAMPLED	NUMBER OF SITES ABOVE ACTION LEVEL	TYPICAL SOURCE OF CONSTITUENT
COPPER (ppm) (2008)	0.17	1.3	ND-0.64	0.24	42	0	Internal corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives
LEAD (ppb) (2008)	2	15	ND-25.9	ND	42	2	Internal corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives

TERMS AND ABBREVIATIONS USED IN THE WATER QUALITY DATA TABLE

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Public Health Goal (PHG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL) is the level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG) is the level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the USEPA.

Primary Drinking Water Standards (PDWS) are MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Regulatory Action Level (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) is a required process intended to reduce the level of a contaminant in drinking water.

ppm = parts per million (milligrams per liter)
ppb = parts per billion (micrograms per liter)

pCi/L = picoCuries per liter
ppt = parts per trillion

N/A = Not Applicable
ND = None Detected

NS = No Standard
NL = Notification Level

***HRAA** = Highest Running Annual Average

BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more expensive than tap water.

Installation of a home treatment unit is a personal matter. These devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems.

However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. All units require maintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitation Foundation (NSF).

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as rings in the bathtub, scales on cooking pots and irons, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier. Distilled water may be used in place of drinking water in irons to prevent deposits.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignificant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.



WATER CONSERVATION TIPS

"We all need to conserve water," is the resounding message from Mark Cowin, Director of the State Department of Water Resources. Despite recent storms California continues to face a water crisis resulting from the past three years of drought as well as environmental constraints. According to Mr. Cowin California's water shortage will continue this year. The District implemented its Phased Water Conservation Plan (Plan) in July 2009 in response to California Governor Arnold Schwarzenegger's state of emergency declaration in February 2009. The Plan required customers to reduce their water use in order to avoid paying higher rates. The Plan will remain in effect until the region's water supply returns to normal levels and the County of Los Angeles Board of Supervisors directs that it be lifted. Residents are highly encouraged to continue to make an extra effort to conserve water given the current condition of the region and District's water supply.

In addition to protecting the quality of water delivered to you, we also promote and implement water conservation programs for the Districts' customers. You can learn how to conserve water at home and save money by calling (888) 828-8602 or email watersurveys@niagaraconservation.com to request a conservation specialist to visit your home at no cost to you. We will provide personalized recommendations for water conserving measures to reduce your water usage without affecting your quality of life. In addition, we offer rebates of up to \$150 on water saving devices like high efficiency clothes washers. For more information visit www.lacwaterworks.org or contact Ms. Virginia Fowler at (626) 300-3362.

Every California resident can take these simple steps to save water and reduce our impact on the planet.

- **Adjust your sprinklers.** Up to 70 percent of residential water use goes to maintaining our yards. Try taking a minute or two off the timer.
- **Check your system.** Do a weekly check for broken or clogged sprinkler heads and replace them right away. Make sure you are watering your yard and not the driveway or sidewalk.
- **Fix those leaks.** Just a drip can waste more than 10,000 gallons per month. A leaking flapper on a toilet also increases flows at the water treatment plant.
- **Plant native species or drought-tolerant plants.** Many of the lawns and plants we use are not intended for the unique climate in Southern California.

Up to 70% of residential water use occurs outdoors. Make sure your sprinklers water the yard, not the sidewalk or street. Landscaping your yard and garden with California native and drought-tolerant plants is also a smart alternative for residents who want to have a beautiful garden and save water and money. These plants are accustomed to local weather and soil conditions and thrive with little summer watering. Using them not only saves water, but saves maintenance time and produces a habitat for native birds, beneficial insects and wildlife. The best time to plant native plants is between October and May each year.

PUBLIC PARTICIPATION AND CONTACT INFORMATION

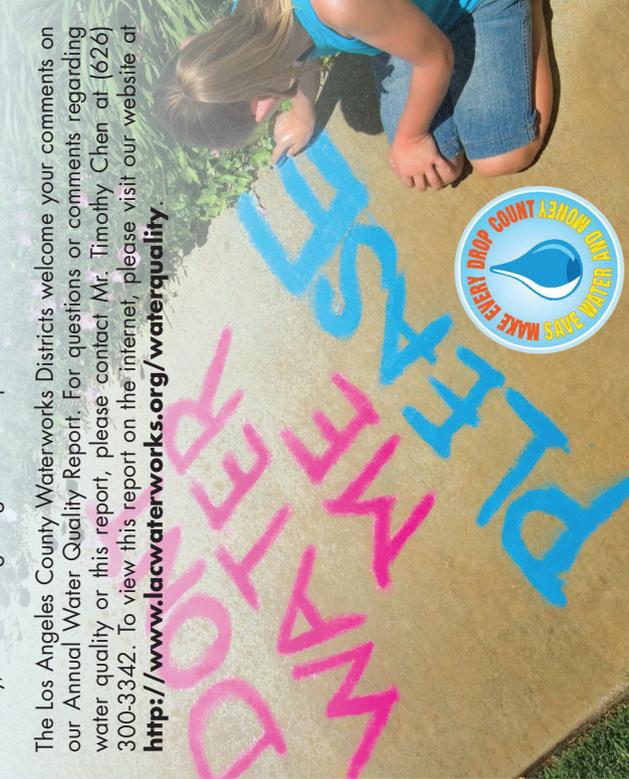
The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday, the meetings begin at 1:00 p.m.

The Los Angeles County Waterworks Districts welcome your comments on our Annual Water Quality Report. For questions or comments regarding water quality or this report, please contact Mr. Timothy Chen at (626) 300-3342. To view this report on the internet, please visit our website at <http://www.lacwaterworks.org/waterquality>.



900 S. Fremont Ave.
Alhambra, CA 91803

To the Water Customer at:



Make every drop count in this drought. Visit www.lacwaterworks.org for rebate information and more water saving tips.